#### Why build roundabouts?

#### **Roundabouts reduce fatalities.**

A study of nine roundabouts in Washington State showed an 80% reduction in fatal and disabling injuries. - The Gray Notebook (WSDOT)

#### Roundabouts save time.

31% of drivers favored a roundabout before construction; 63% of drivers favored a roundabout after it was built.

The proportion of vehicles having to stop declined 14% to 37% across numerous samples taken from roundabouts in Kansas, Maryland, and Nevada. - Insurance Institute for Highway Safety

#### **Roundabouts are GREEN**

Because roundabouts improve the efficiency of traffic flow, they also reduce vehicle emissions and fuel consumption.

Studies show replacing traffic signals and stop signs with roundabouts reduced:

- · Carbon monoxide emissions by 32%.
- Nitrous oxide emissions by 34%.
- · Carbon dioxide emissions by 37%.
- Hydrocarbon emissions by 42%.

Constructing roundabouts in place of traffic signals can reduce fuel consumption by about 30%. At 10 intersections studied in Virginia, this amounted to more than 200,000 gallons of fuel saved per year.



**Existing Condition** 



**Design Visualization** 

## **For More Information**

#### **WSDOT - South Central Region**

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Updated July 2009 WSDOT, South Central Region (509) 577-1639



# **US 395 – Columbia Drive to SR 240 Rebuild Interchange**

## **Project Purpose**

This project will reconfigure the US 395/SR 240 interchange to improve traffic flow and reduce the risk of collisions.

### **Project Benefits**

- Improve safety
- Increase traffic efficiency
- Decrease congestion

#### **Estimated Total Project Cost**

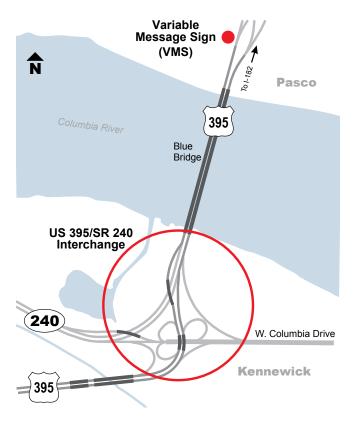
Total: \$16.0 million

Note: This estimate includes engineering, right of way, and construction costs.

#### **Project Timeline**

✓ Start design: November 2005

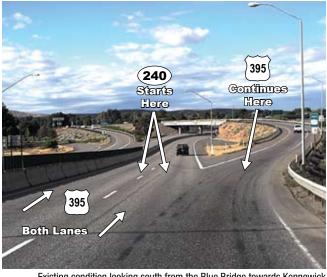
✓ Advertise project: Fall 2008 ✓ Scheduled construction: Spring 2009 ✓ Open to traffic: Winter 2009



#### Why is WSDOT improving the interchange?

US 395 and SR 240 are both heavily traveled highways. Currently, the primary traffic flow for southbound drivers crossing the Blue Bridge is to continue south on US 395, which means exiting on a single lane ramp. During peak travel times, backups and collisions occur frequently. In the past three years, the Washington State Patrol responded to over 350 collisions on or near the Blue Bridge. Interchange improvements include two through-lanes for US 395 with an exit ramp to SR 240. During construction WSDOT will install a ramp meter for Lewis Street traffic merging onto southbound US 395.

In 2004, a project funded by the nickel gas tax added a Variable Message Sign (VMS) for traffic heading south on US 395. Several times a month, messages on the VMS warn motorists of collisionrelated congestion to help prevent additional collisions. This interchange project will improve traffic flow and further reduce the likelihood of collisions.



Existing condition looking south from the Blue Bridge towards Kennewick



# **Good design saves \$**

WSDOT refined the project design and eliminated the need for right of way. A low bid of \$11.52 million from KLB Construction Inc. reduced the cost of construction below WSDOT's estimate. The new total project cost of \$16.0 million is 29% less than the original budgeted cost.

# **How to Drive a Roundabout**



- 1. Get in the correct lane early. Observe pavement markings and signs. Use the right lane to turn right or go straight. Use the left lane to go straight, turn left, or u-turn.
- 2. Give large trucks room to take up both lanes as they approach, circulate and exit the roundabout.
- 3. Yield to all traffic in the roundabout, even if you're only entering the right outside lane of the roundabout.
- 4. Never pass or change lanes in the roundabout.
- 5. When exiting from the inside lane, check the lane next to you and your blind spot to make sure the outside lane is clear. Use your turn signal to let other drivers know you are exiting.



- 1. As you approach a roundabout, there will be a yield sign. Take both lanes before reaching the yield sign. This may be necessary to make a right turn, and helps to prevent cars from entering next to you.
- 2. As you enter, yield to circulating traffic on the left, but you don't need to stop if the way is clear. Feel free to use the raised area around the center island, it's called a truck apron and is designed to support large trucks.
- 3. Stay to the right of the center island and hug the outside of the circle. Your trailer may ride up on the truck apron but that's exactly what it's designed for.
- 4. As you exit the roundabout you may need to drive on the truck apron again to keep your trailer from riding up on the exit curb.

